

FIG. 1
PRIOR ART

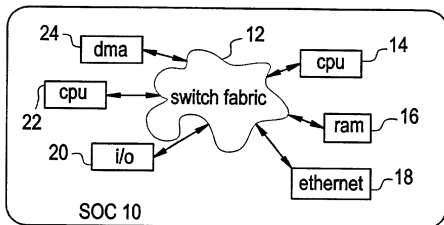
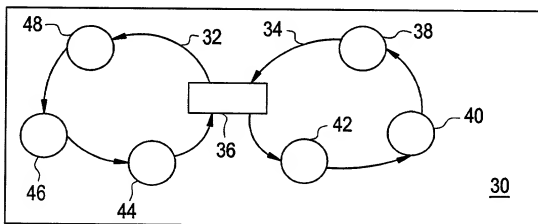


FIG. 2



10064330.002702

FIG. 3

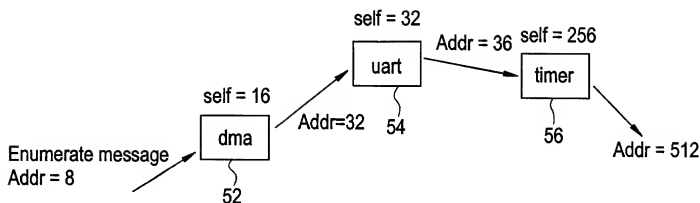


FIG. 4

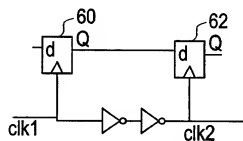


FIG. 5

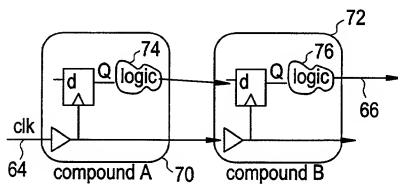


FIG. 6

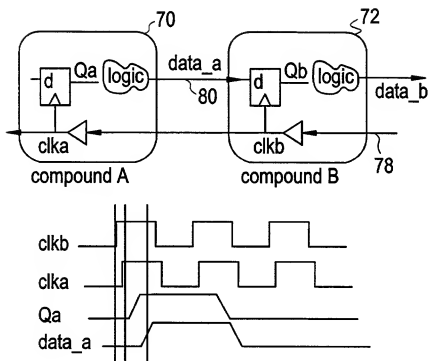


FIG. 7

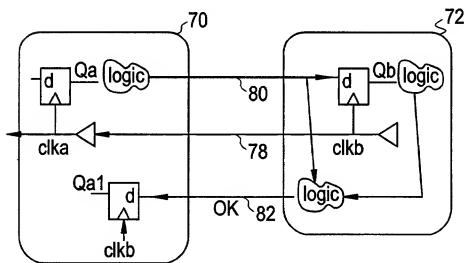


FIG. 8

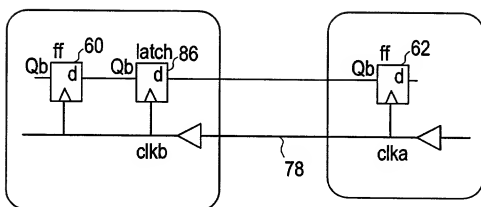
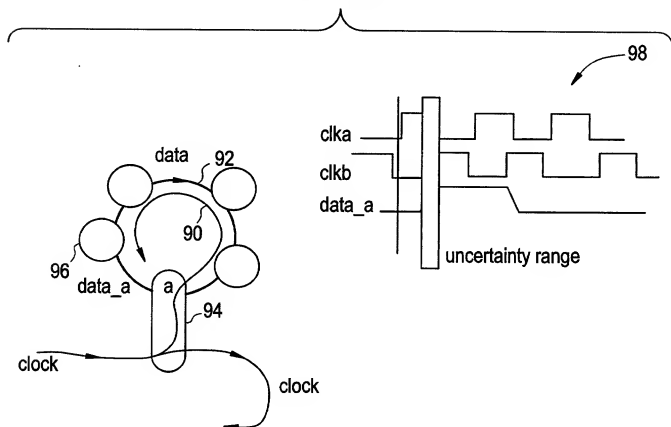


FIG. 9



10064379.002702

FIG. 10

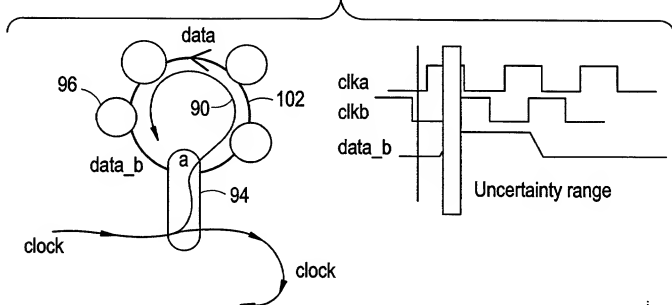


FIG. 11

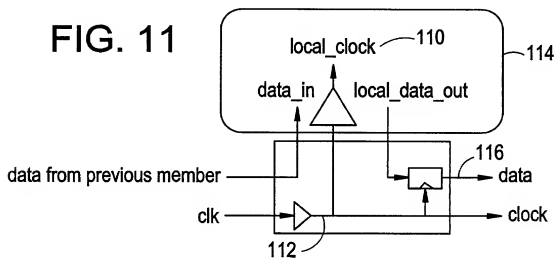


FIG. 12

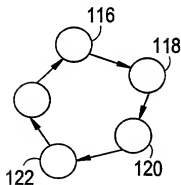


FIG. 13

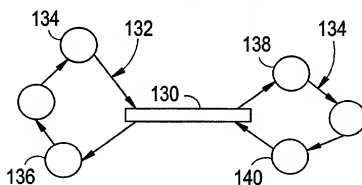


FIG. 14

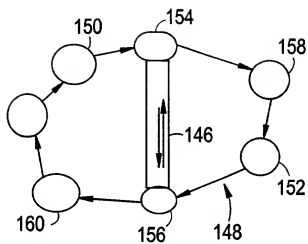


FIG. 15

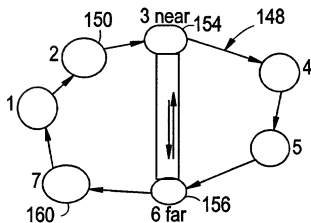


FIG. 16

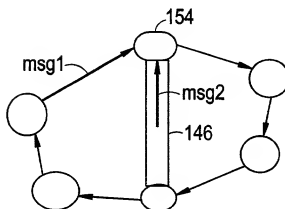


FIG. 17

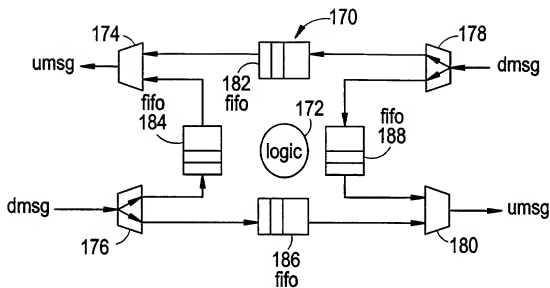


FIG. 18

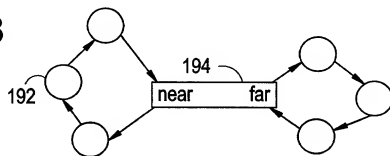


FIG. 19

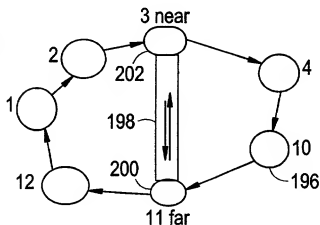


FIG. 20

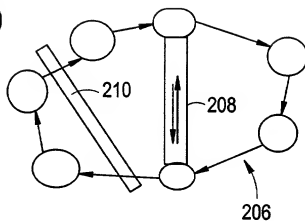


FIG. 21

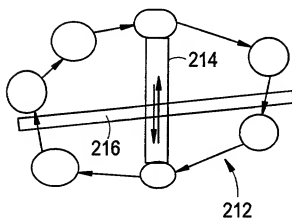


FIG. 22

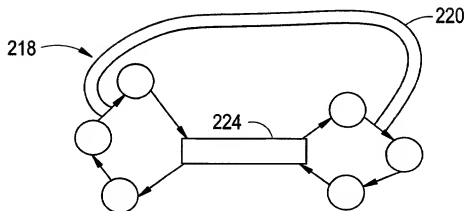


FIG. 23

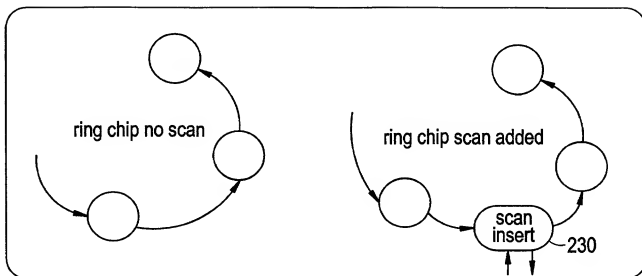


FIG. 24

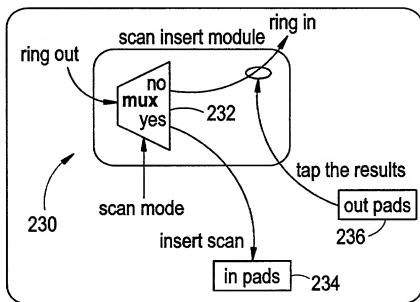


FIG. 25

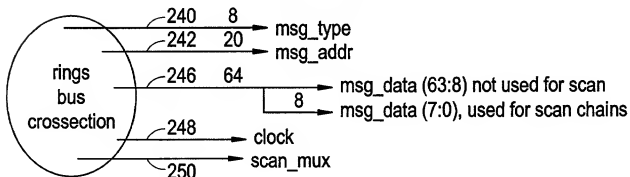


FIG. 26

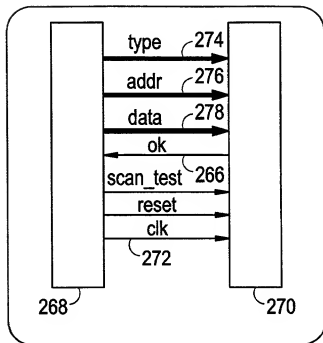
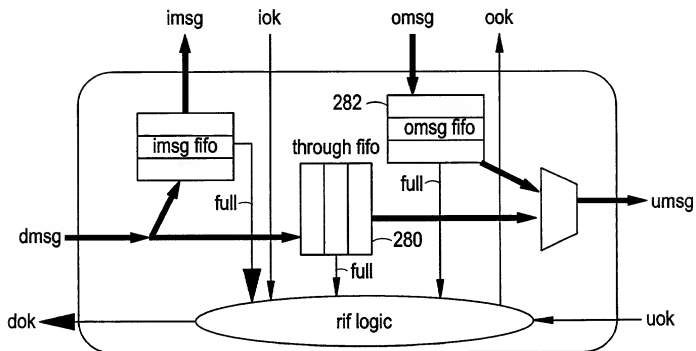


FIG. 27



10054339.002762

FIG. 28

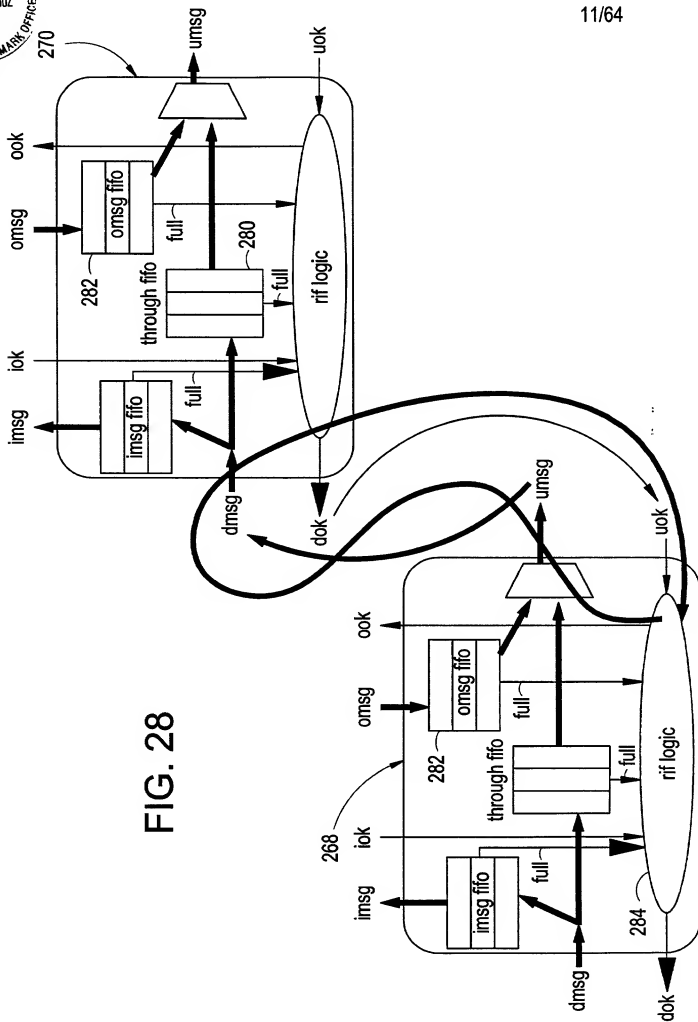


FIG. 29

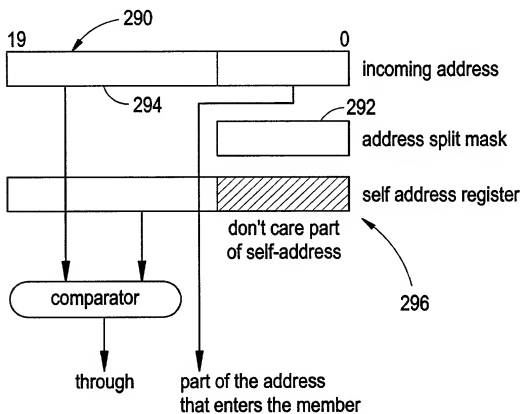


FIG. 30

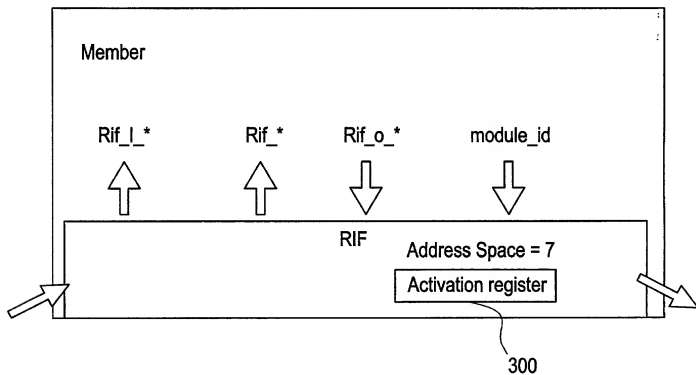


FIG. 31

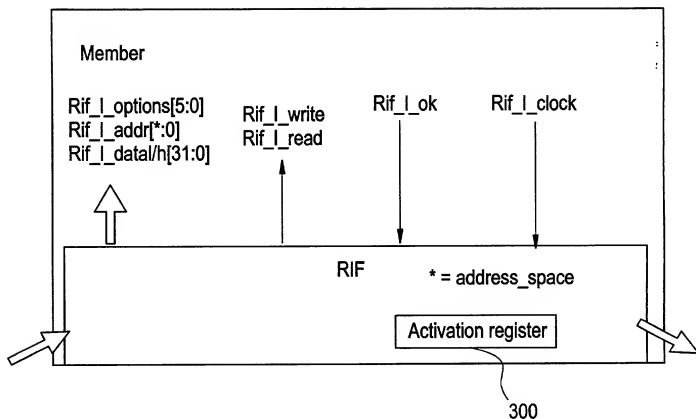


FIG. 32

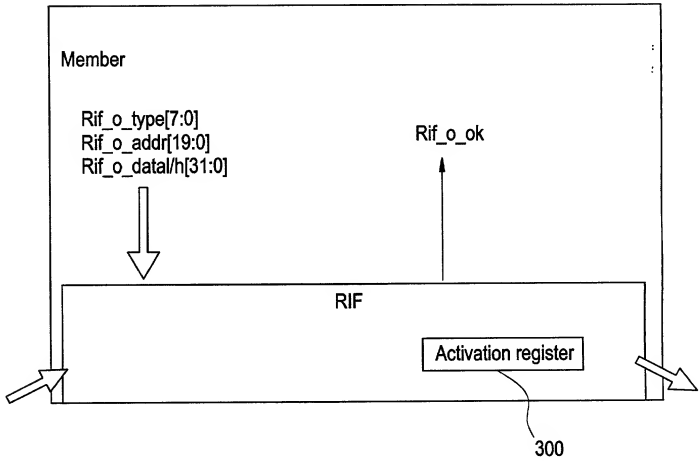
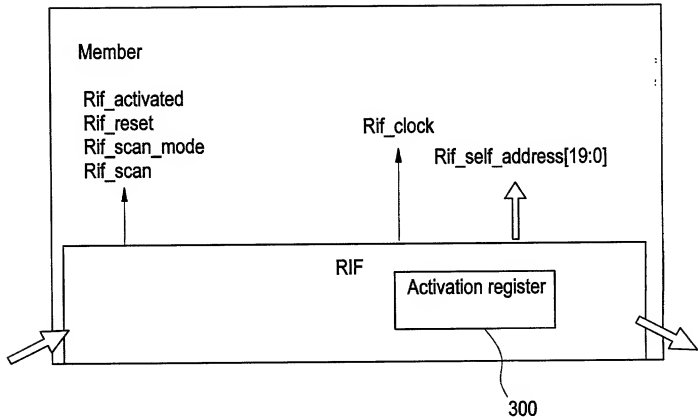


FIG. 33



17/64

FIG. 34

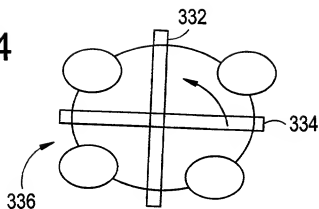


FIG. 35

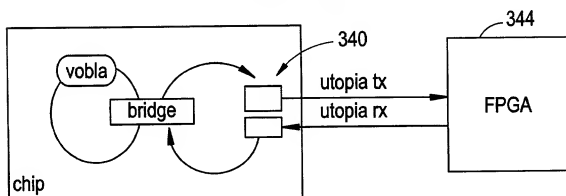


FIG. 36

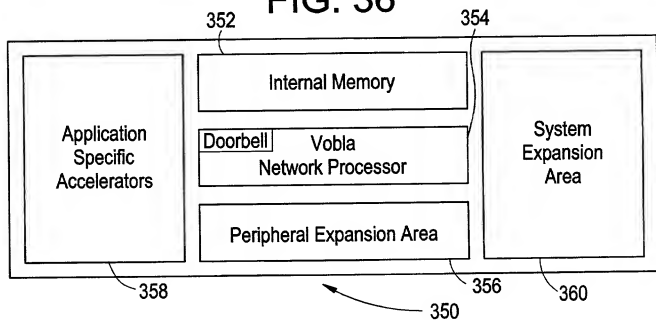
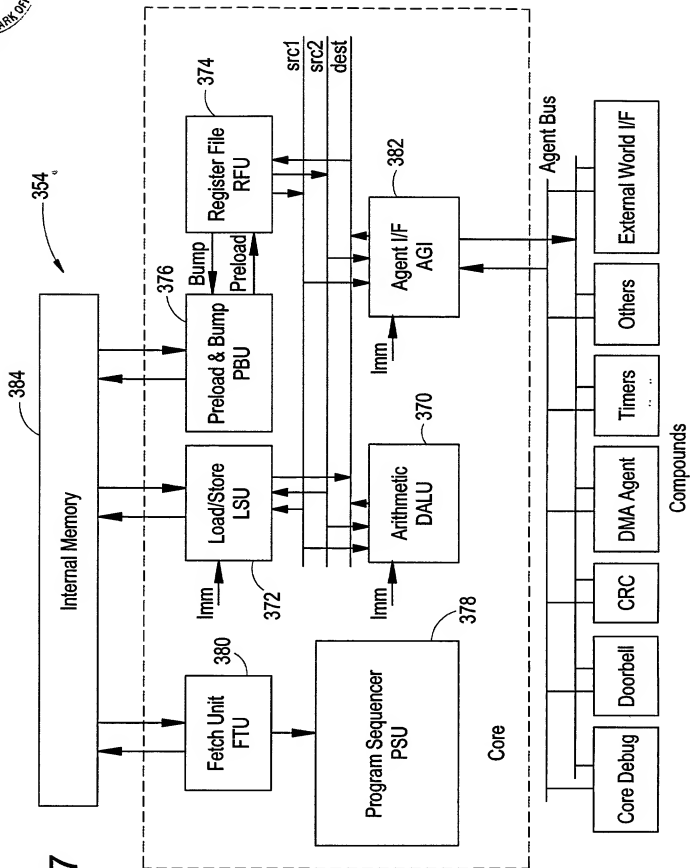
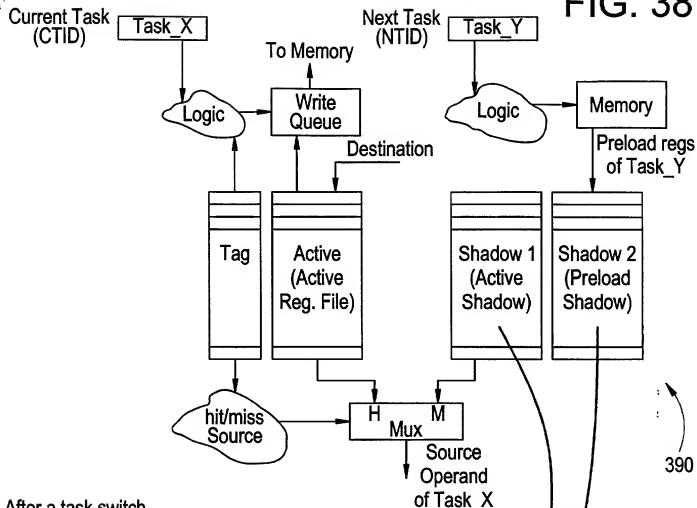


FIG. 37



19/64

FIG. 38



After a task switch

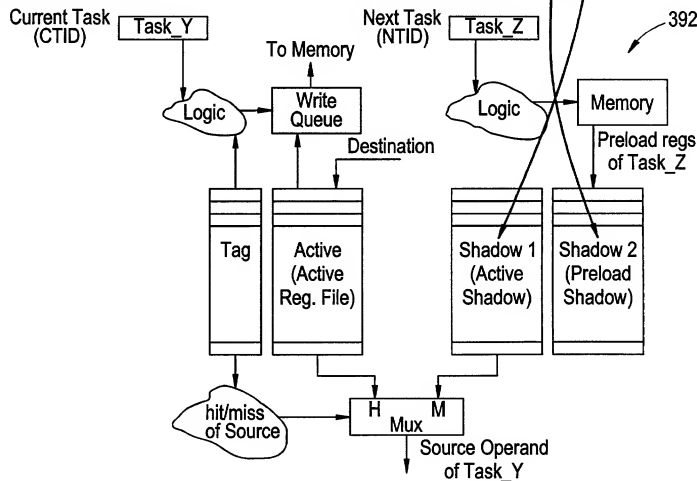


FIG. 38

20/64

FIG. 39

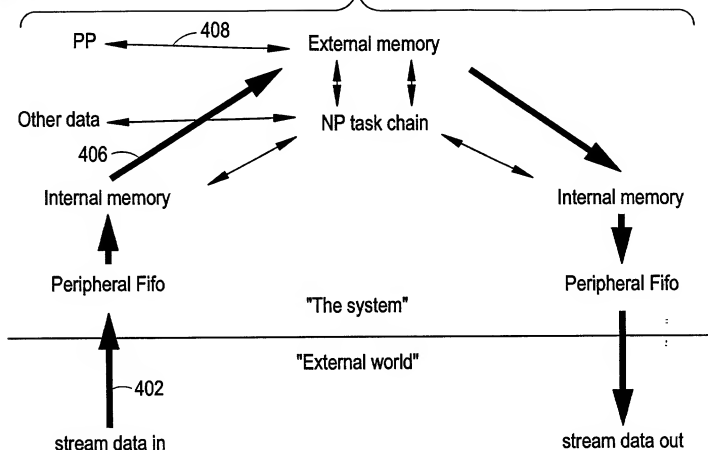


FIG. 40

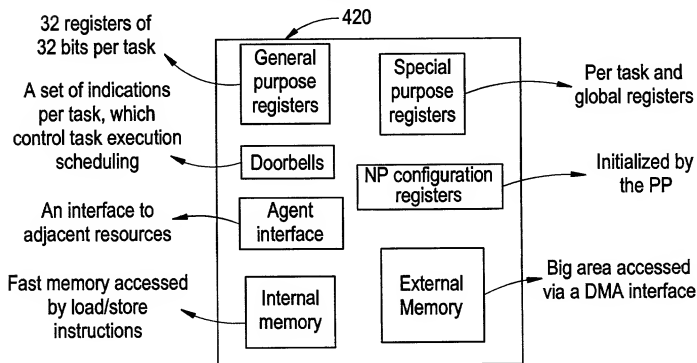
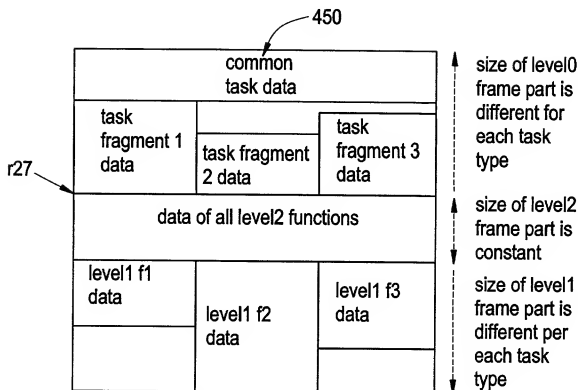




FIG. 43



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FIG. 44

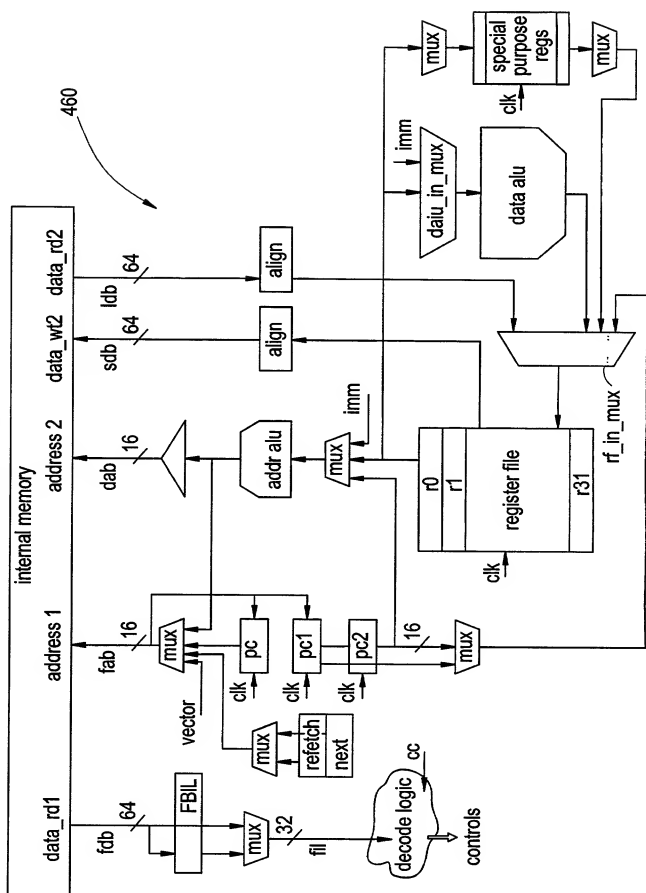
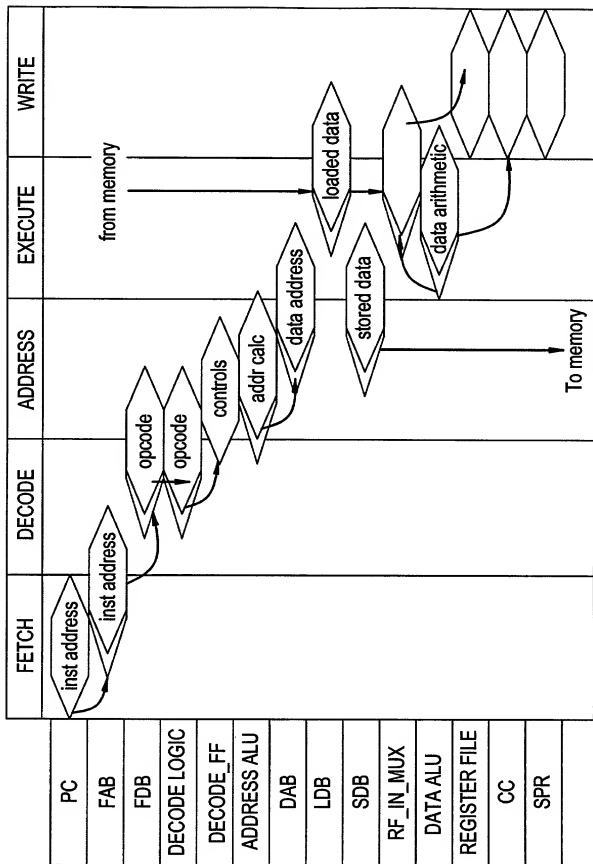


FIG. 45



- Flip Flop
 - Logic

FIG. 46

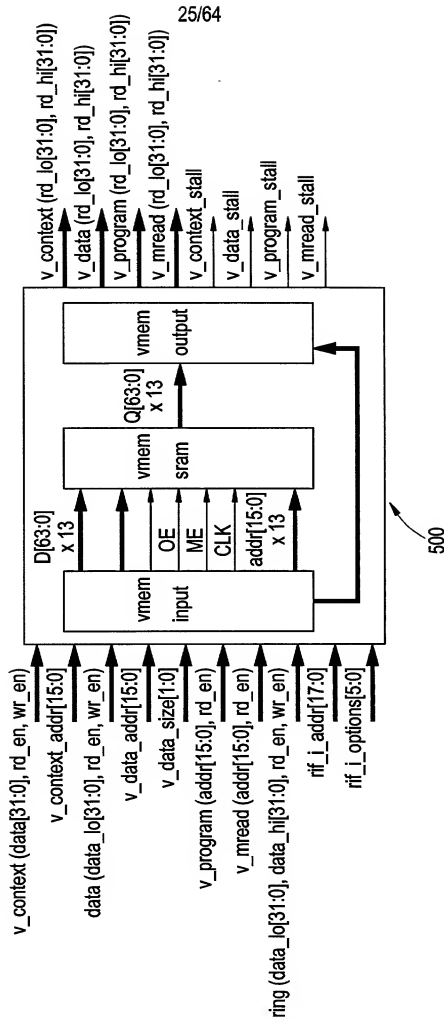


FIG. 47

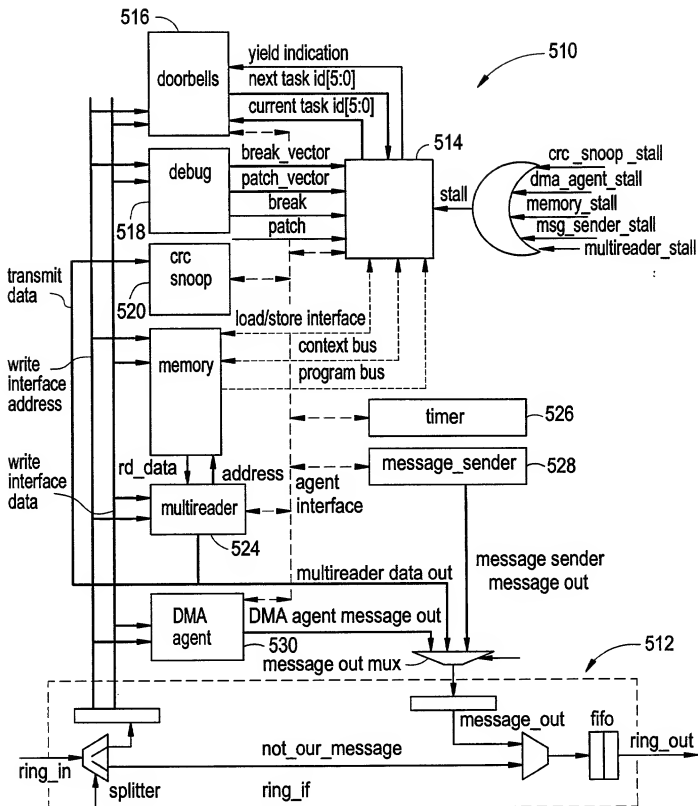


FIG. 48

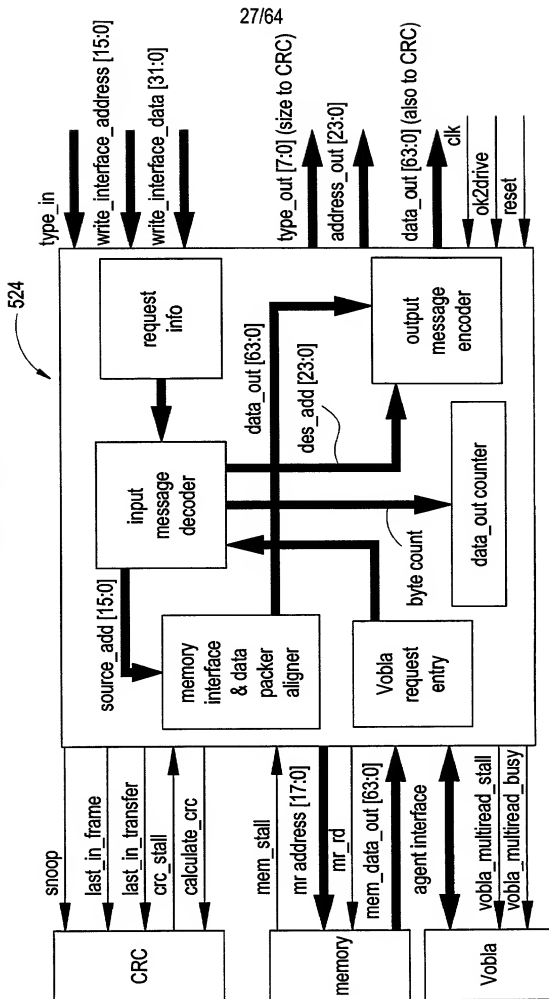
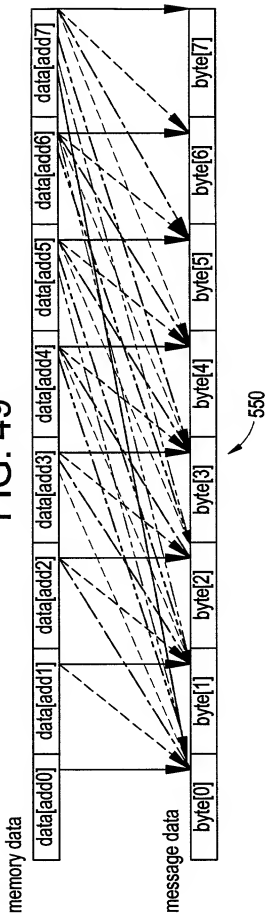


FIG. 49



28/64

FIG. 50

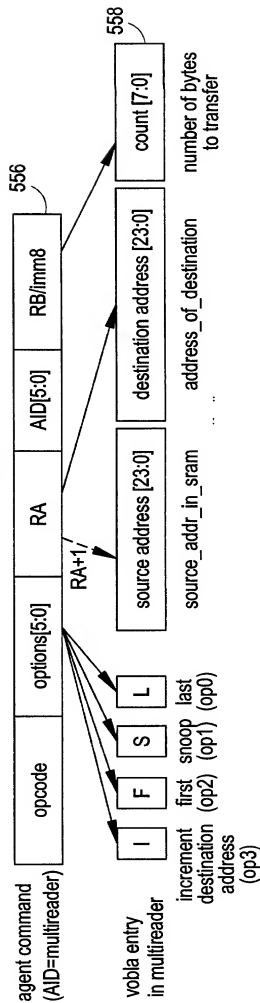


FIG. 51

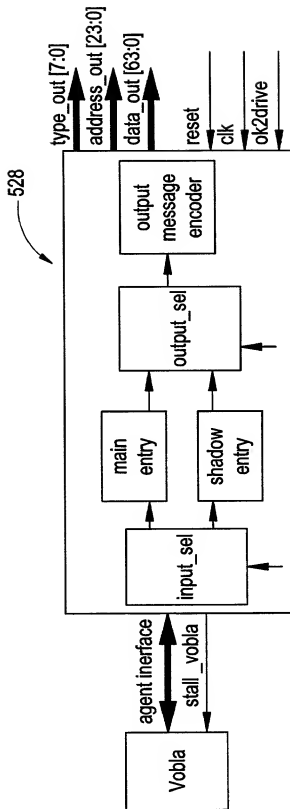


FIG. 52

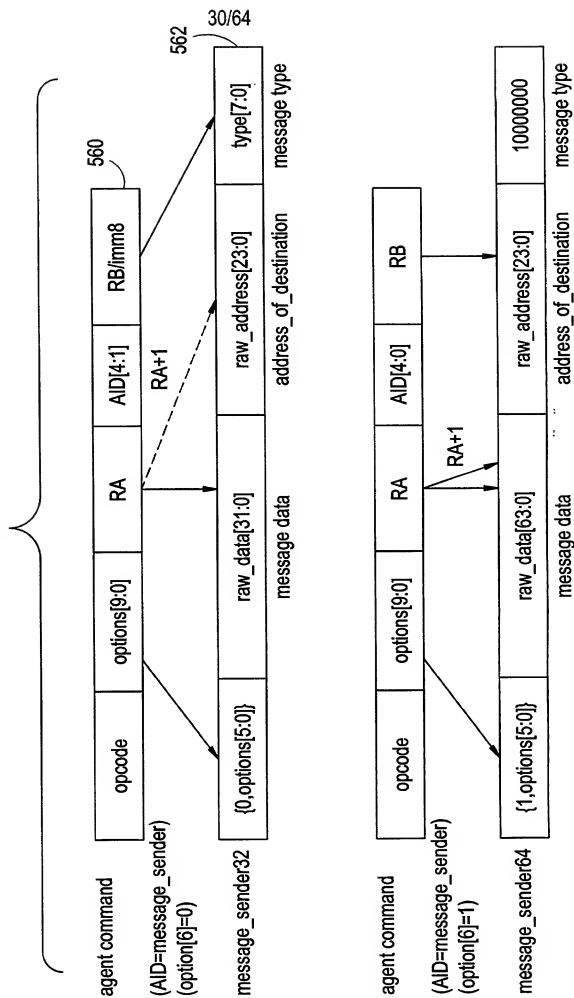


FIG. 53

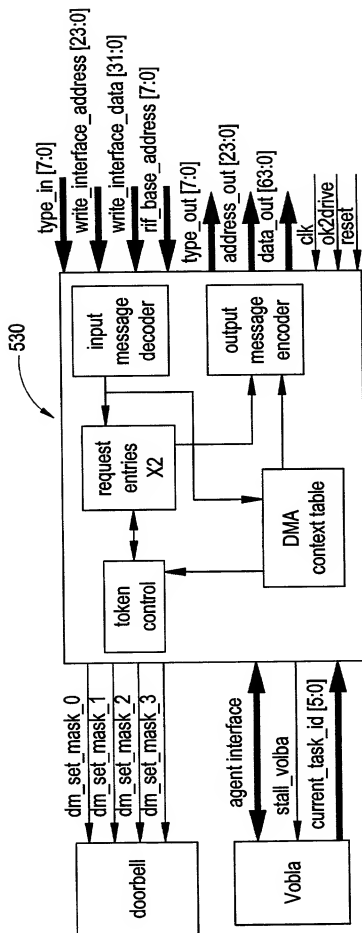


Figure 1 is a block diagram of the DMA request entry. The entry is a 32/64-bit structure divided into several fields: agent command (AID=dma agent), opcode, options[10:0], RA, AID[4:0], RB/imm8, and a 576-bit field. The options field is further divided into M (modify address OP9), U (urgent OP2), D (dir OP1), A (auto set OP0), NA (send ack OP3), and L (long address OP10). The RA field points to RA+1, which then points to the dram address [31:0]. The AID[4:0] field points to the dram address [31:0]. The RB/imm8 field points to the sram address [23:0]. The 576-bit field points to the {count [7:0]} field. The dram address [31:0] is labeled 'dram address' and the sram address [23:0] is labeled 'sram address'. The {count [7:0]} field is labeled 'number of bytes to transfer or address modifier'.

FIG. 55

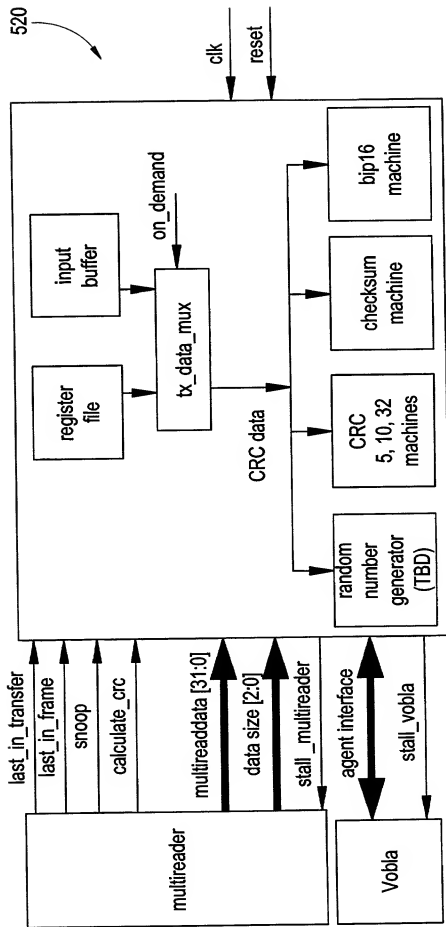


FIG. 56

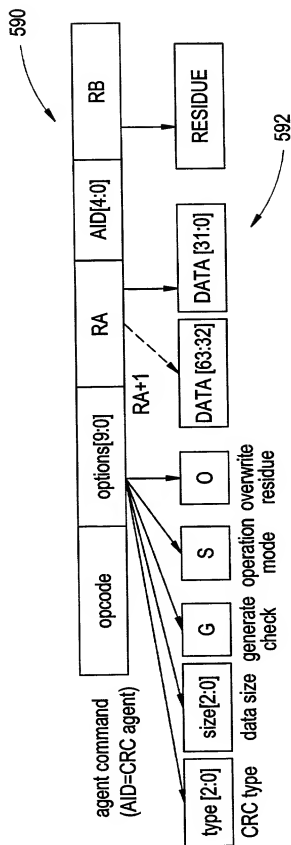


FIG. 57

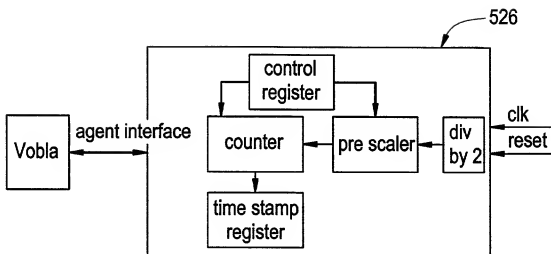


FIG. 58

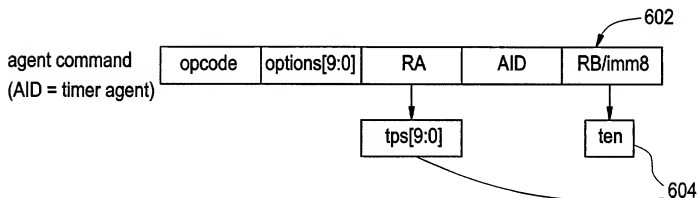


FIG. 59

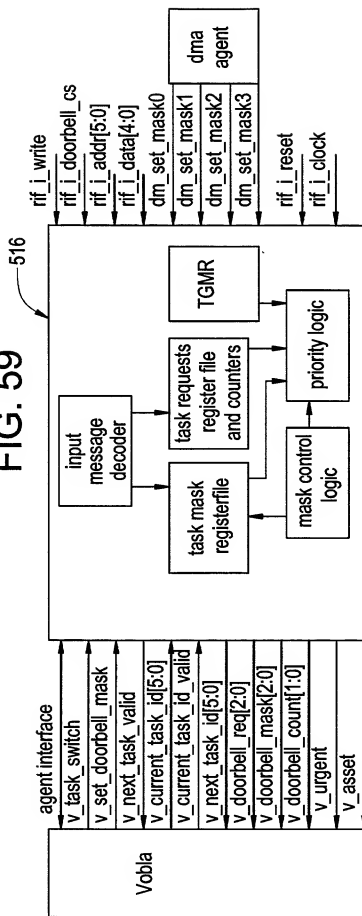


FIG. 60

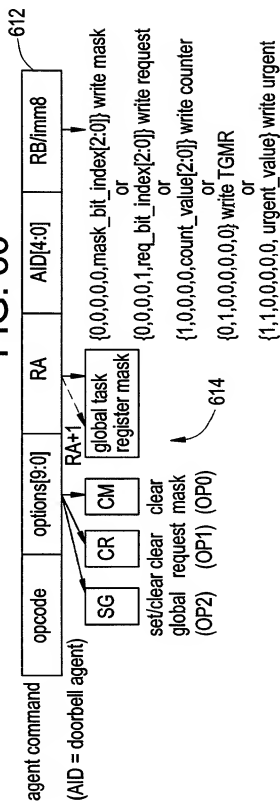
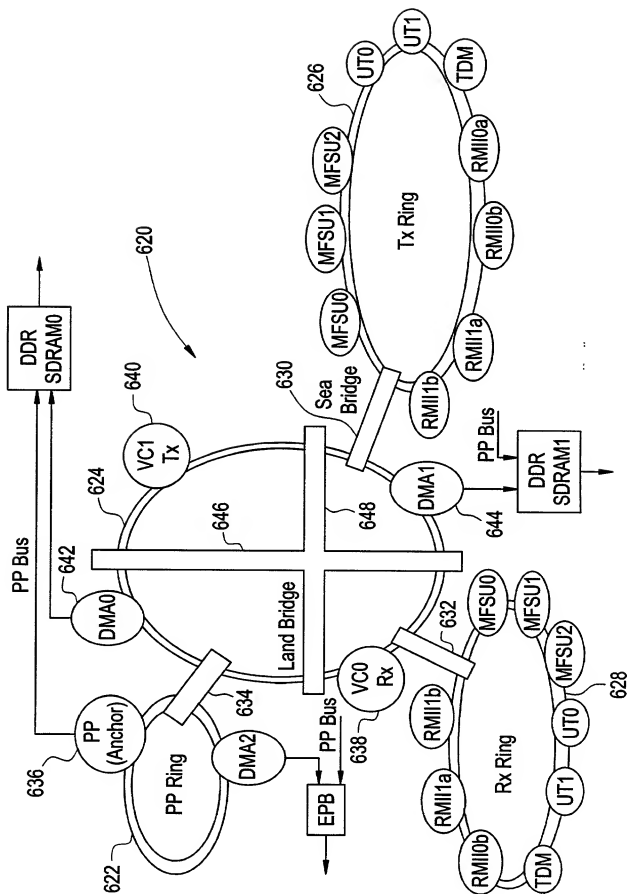


FIG. 61



202260-06519001

FIG. 62

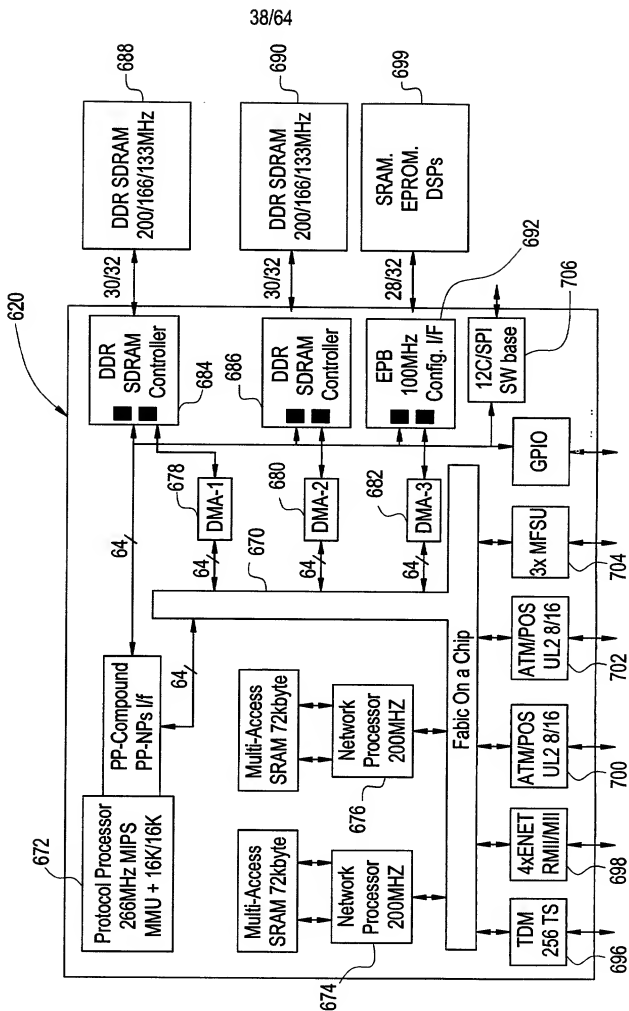


FIG. 63

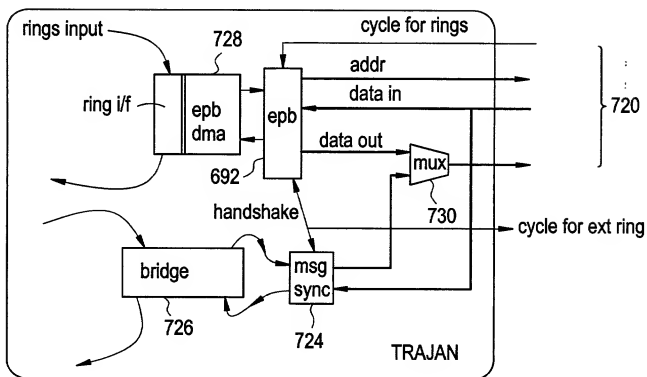


FIG. 64

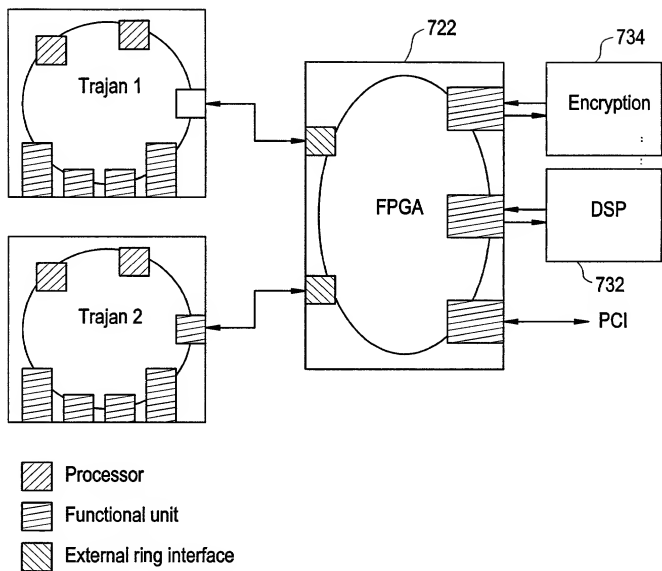


FIG. 65

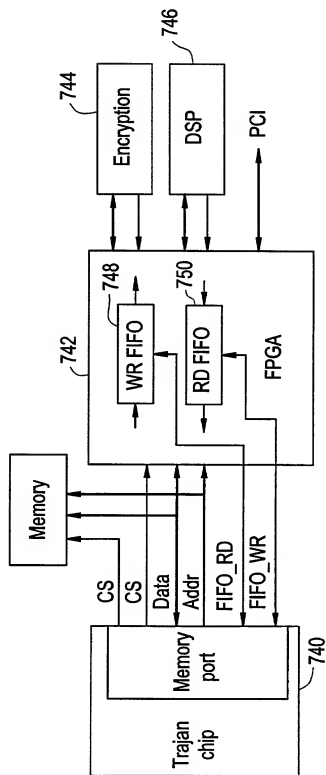


FIG. 66

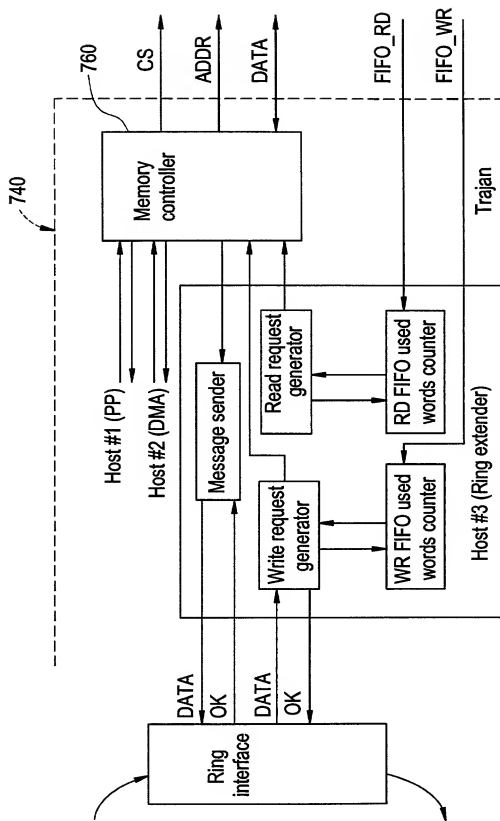


FIG. 67

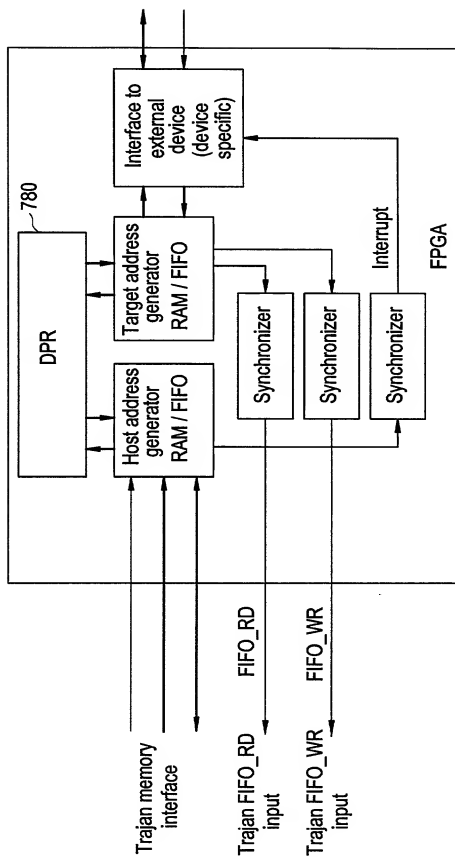


FIG. 68

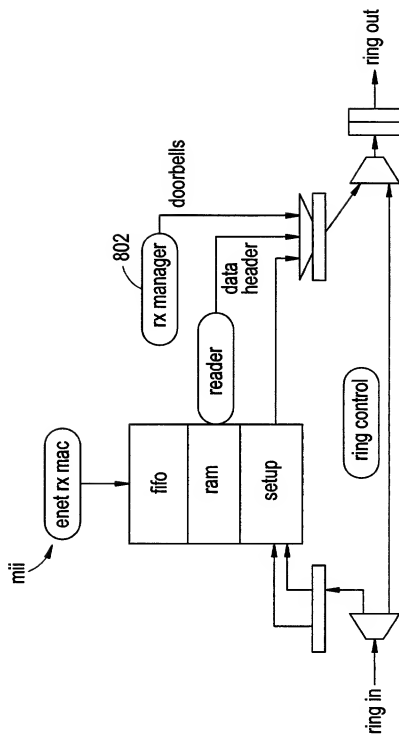


FIG. 69

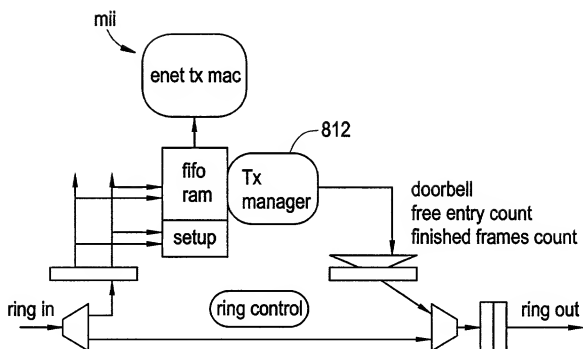


FIG. 70

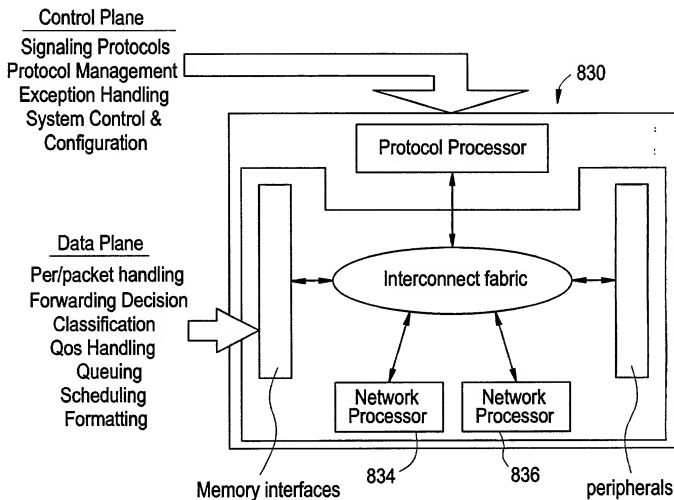


FIG. 71

840

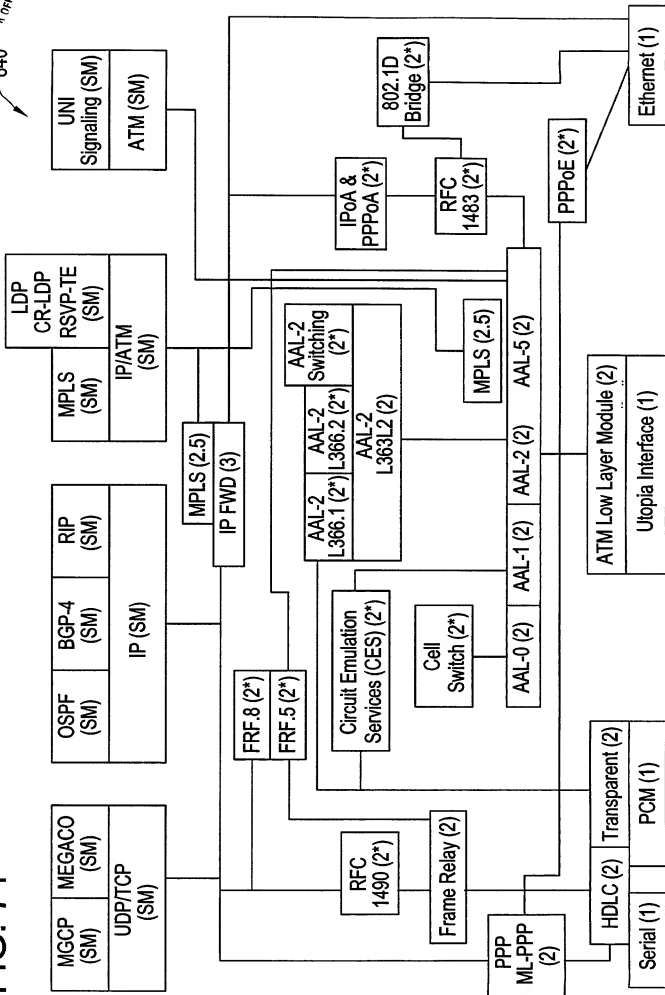


FIG. 72

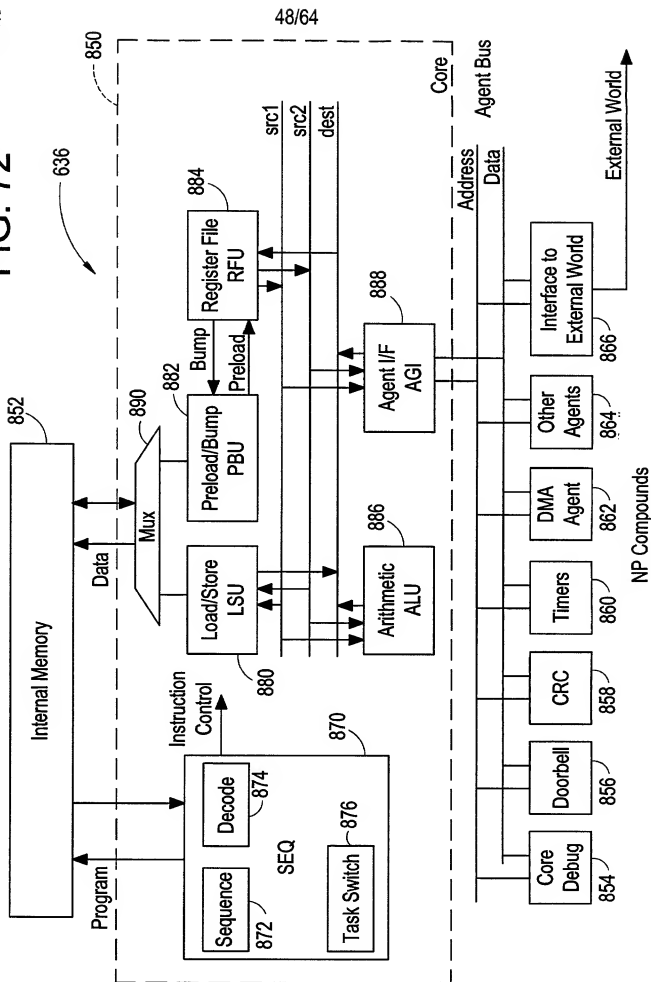


FIG. 73

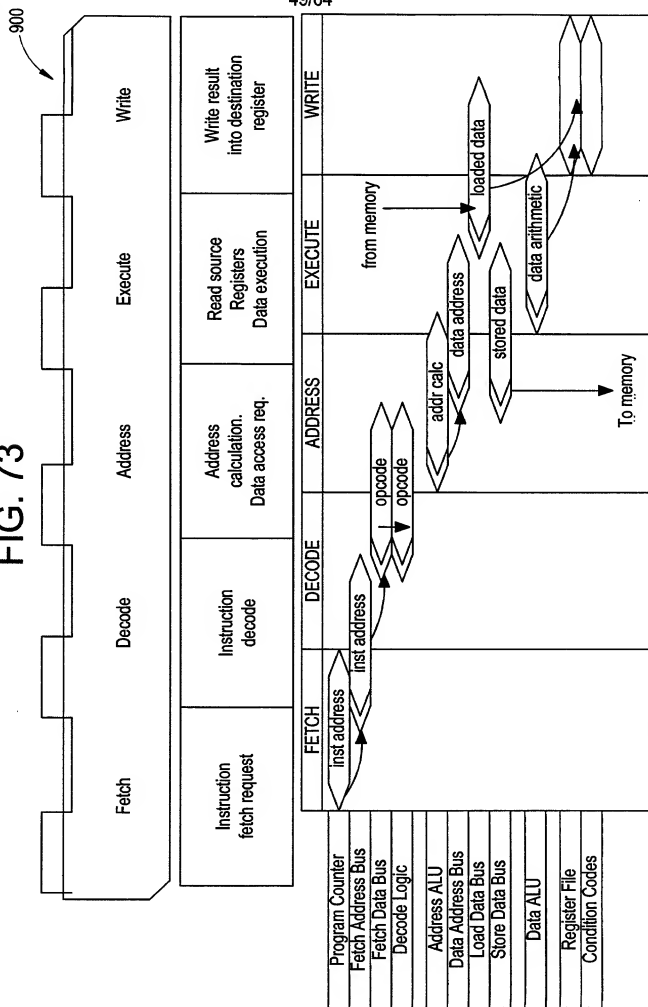


FIG. 74

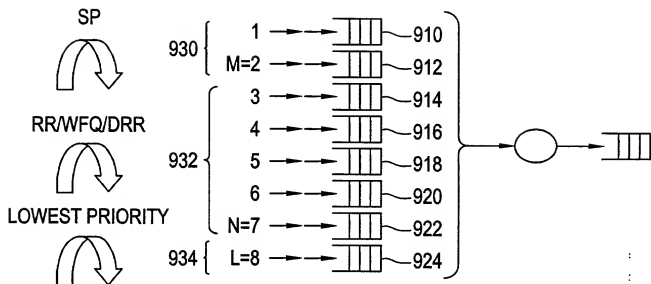
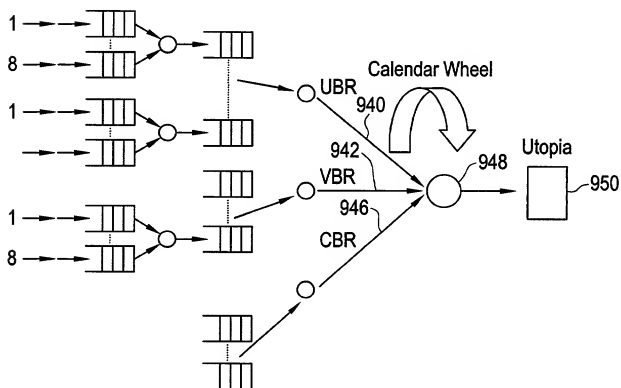


FIG. 75



202260-00019001

51/64

FIG. 76

960

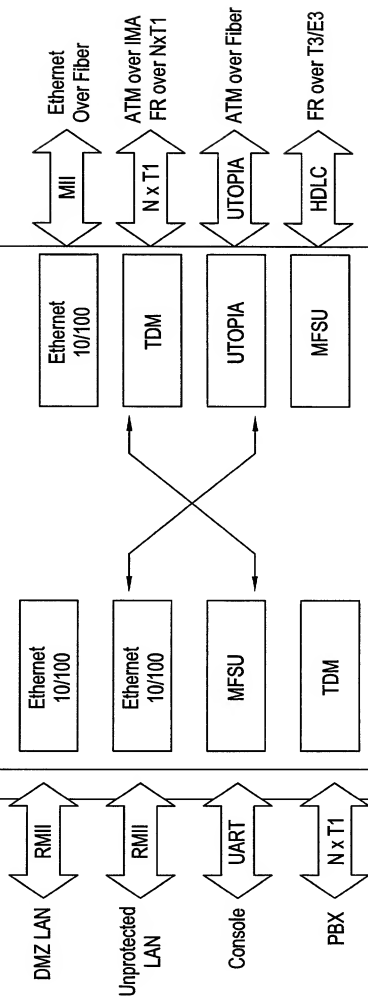


FIG. 77

970

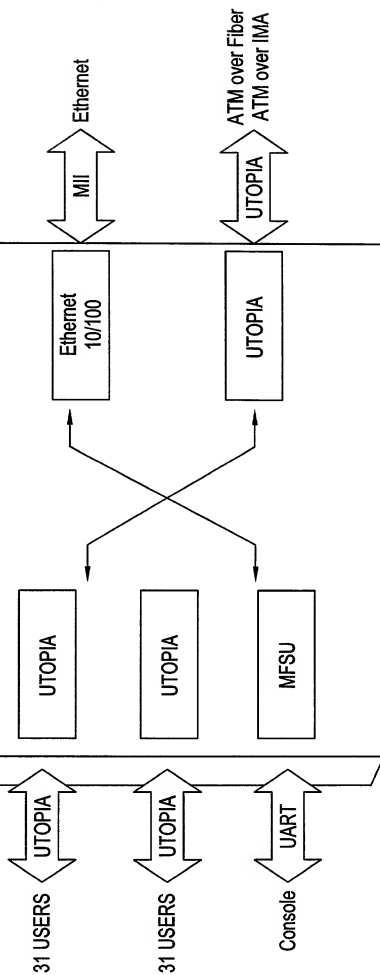


FIG. 78

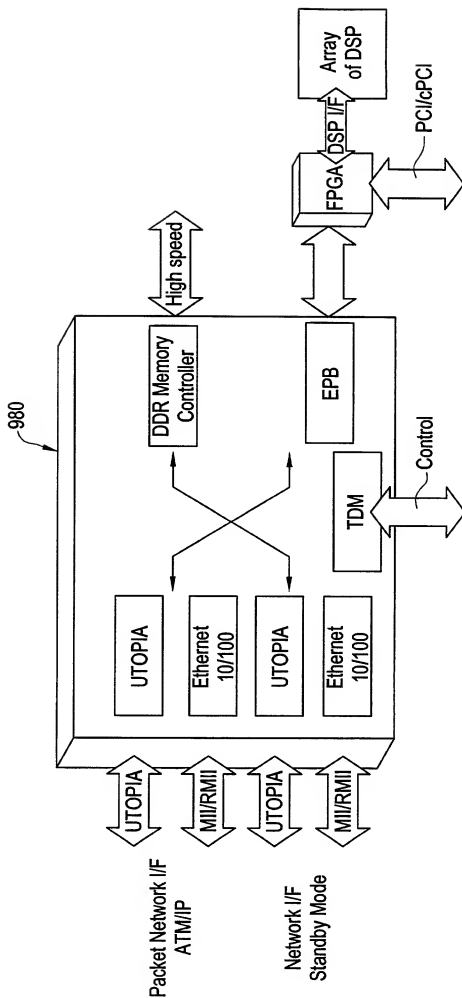


FIG. 79

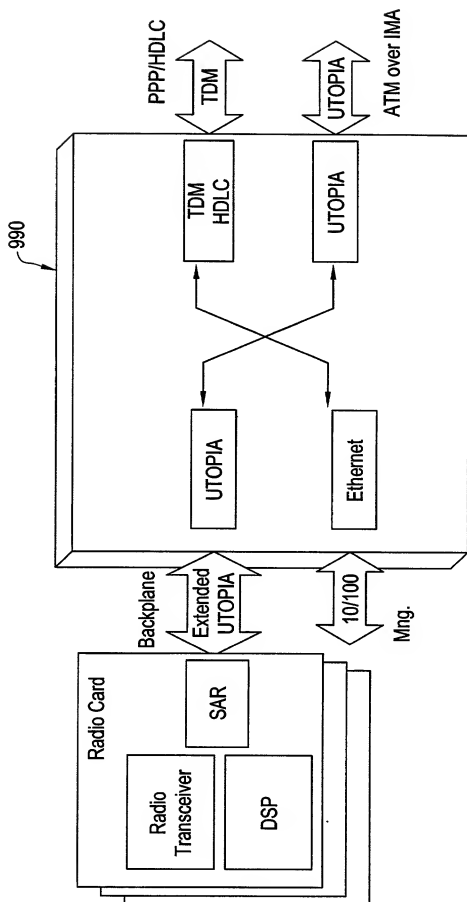


FIG. 80

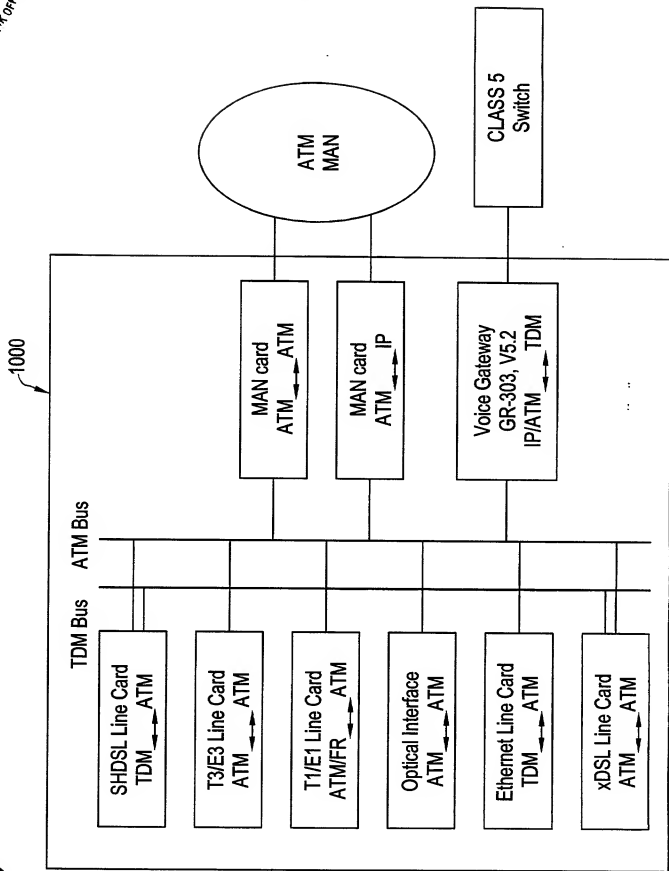


FIG. 81

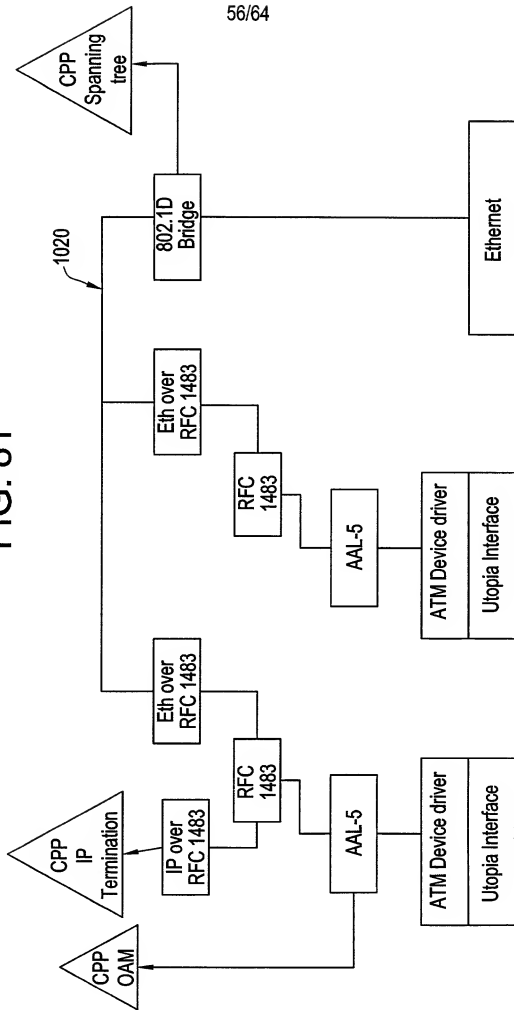


FIG. 82

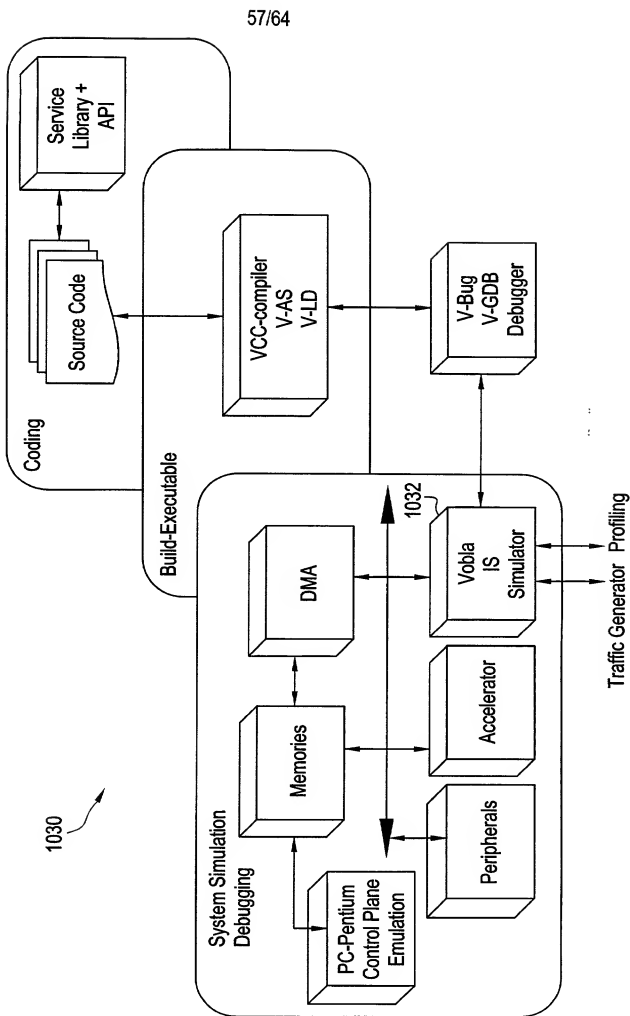


FIG. 83

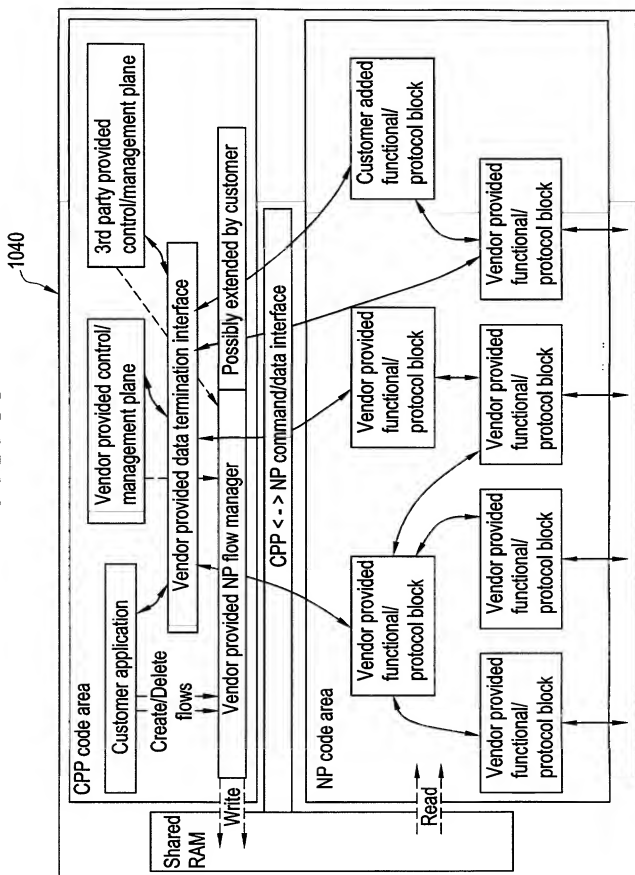
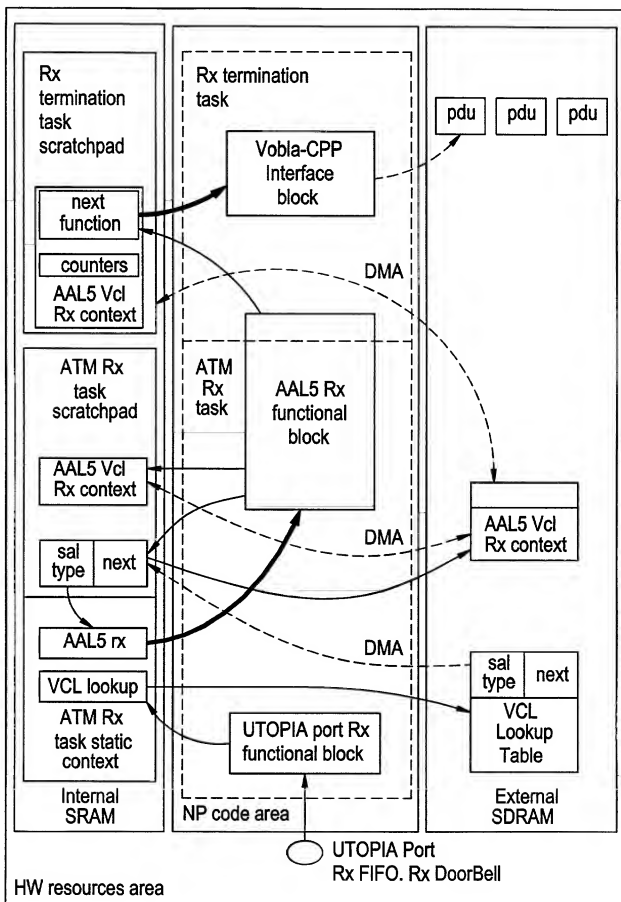


FIG. 84

1050



2004/03/30 "092702"

FIG. 85

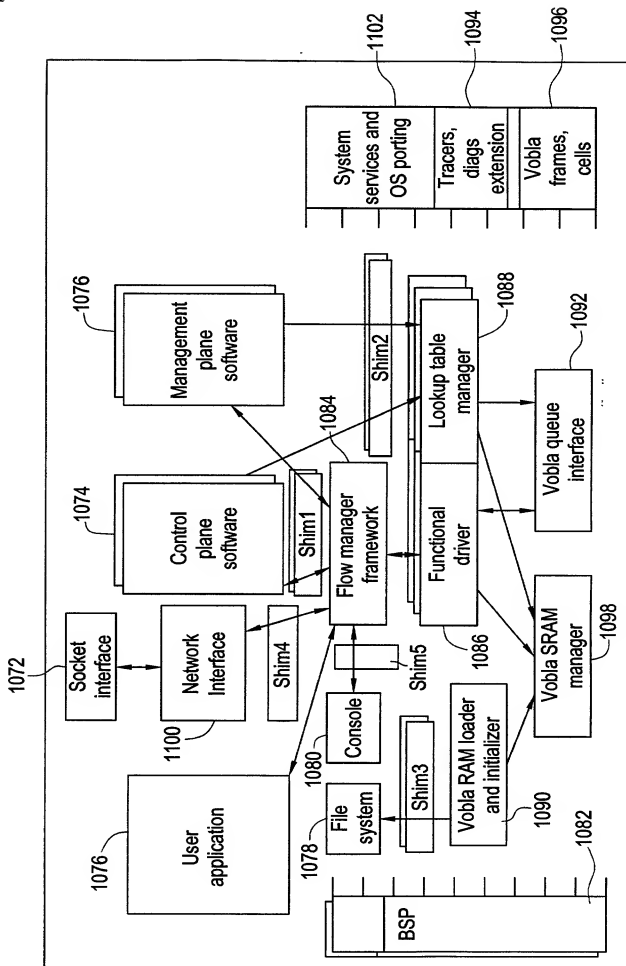


FIG. 86

1200

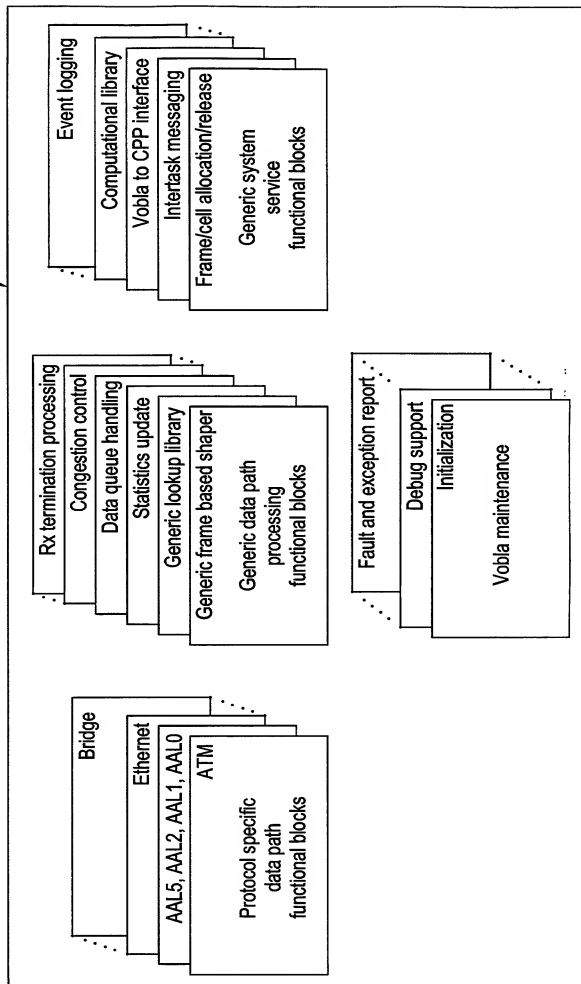
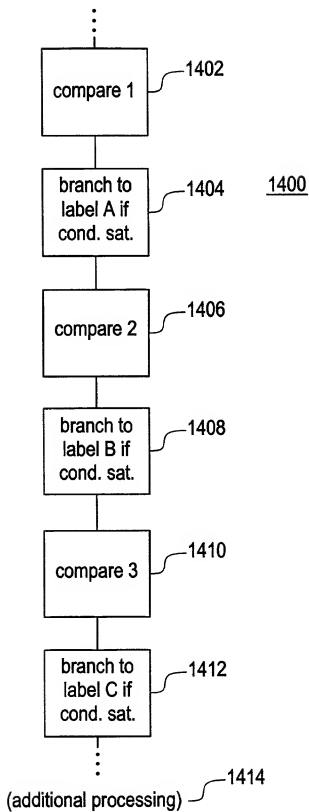


FIG. 87

PRIOR ART



10064239 "092702
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FIG. 88

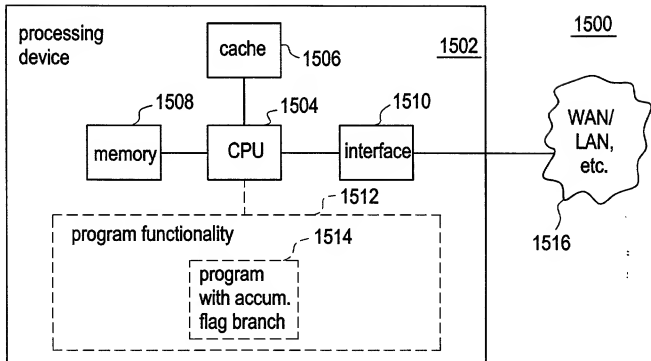


FIG. 89

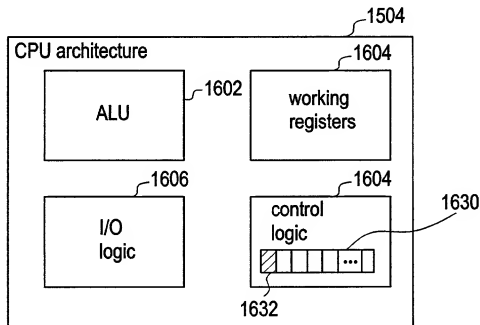


FIG. 90

